

ABSTRACT OF THE DISCLOSURE

A tandem pump assembly of the type including a housing (H) defining a fluid inlet port (37) and a fluid outlet port (35), a first pump (11) disposed in the housing (H) and driven by an input shaft (19). The first pump (11) comprises a variable displacement, over-center pump, including first fluid pressure responsive means (31) for varying the displacement of the first pump (11) in response to the porting of a control pressure (47). The first pump has an inlet (67) in fluid communication with the fluid inlet port (37), and an outlet (65) in fluid communication with the fluid outlet port (35). A second pump (33) is disposed in the housing (H) and driven by the input shaft (19), said second pump having an inlet in fluid communication with the fluid inlet port (37), and an outlet in fluid communication with the fluid outlet port (35). The assembly is characterized by the tandem pump assembly including pressure override valve means (71,73) associated with only the first pump (11), and operable, in response to a fluid pressure at the fluid outlet port (35) in excess of a pressure override setting (79), to communicate pressurized fluid to the first fluid pressure responsive means (31), in a manner tending to decrease the displacement of the first pump (11) without effecting the displacement of the second pump (33), until said fluid pressure is substantially equal to the pressure override setting (79), even if it is necessary for the first pump (11) to go over-center from its initial displacement.